

**Notice of Allowability****Application No.**

10/003,416

**Applicant(s)**

NUN, MICHAEL BEN

**Examiner**

Salman Ahmed

**Art Unit**

2666

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/1/05.
2. ☒ The allowed claim(s) is/are 9(currently changed to 1), 10(Currently changed to 2), 17-26(Currently changed to 3-12), 29-42(Currently 13-26), 45-50(Currently changed to 27-32).

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                               | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material         | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                        |
|  | 9. <input type="checkbox"/> Other ____.  |

43. (Original) The software as claimed in claim 42, wherein said operation (c) comprises:

(c1) if said first ATM cell comprises said full IP tuple, creating said full IP tuple from said first ATM cell;

(c2) if said first ATM cell does not comprise said full IP tuple, receiving a second ATM cell; and

(c3) after receiving said second ATM cell, if said first ATM cell and said second ATM cell comprise said full IP tuple, creating said full IP tuple from said first ATM cell and said second ATM cell.

44-45. (Canceled)

46. (Currently amended) The software as claimed in ~~claim 45~~ claim 42, wherein said validity field indicates that said second pointer points to said particular process flow information after said full IP tuple is created, and

wherein said validity field indicates that said second pointer is invalid after a last data packet corresponding to said full IP tuple has been received.

3. Specification is amended as follows:

In page 1 line 13 "(U.S. Appln. No. 09/547034)" is changed to

--(U.S. Appln. No. 09/547034, now abandoned)--

***Allowable Subject Matter***

4. Claims 9, 10, 17-26, 29-42, 45-50 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salman Ahmed whose telephone number is (571)272-8307. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571)272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SA

Salman Ahmed  
Examiner  
Art Unit 2666 *Seema S. Rao*  
**SEEMA S. RAO** *2/6/06*  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may  
5 be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas E. Spath on 20 and 23 Jan 2006.

- 10 2. Claims 25, 29, 42 and 46 are amended as indicated and claims 27, 28, 43 and 44 are cancelled.

25. (Currently amended) A method for classifying Internet protocol (IP) packets transferred in data cells over an asynchronous transfer mode (ATM) network,  
15 comprising:

- (a) receiving a first ATM cell;
- (b) determining if said first ATM cell comprises a full IP tuple;
- (c) if said first ATM cell comprises said full IP tuple, creating said full IP tuple from said first ATM cell;
- 20 (d) determining if said full tuple corresponds to an existing process flow;
- (e) if said full tuple does not correspond to an existing process flow, generating new process flow information as particular process flow information; and

(f) if said full tuple corresponds to an existing process flow, determining that existing process flow information corresponds to said particular process flow information;

(g) storing said particular process flow information in a first memory

5 location;

(h) creating a first pointer from a virtual channel identifier/virtual path identifier (VCI/VPI) contained in said first ATM cell, wherein said first pointer at least indirectly points to said first memory location; and

(i) storing a second pointer in a second memory location,

10 wherein said second pointer comprises a validity field and points to said first memory location after said full IP tuple is created, and  
wherein said first pointer points to said second memory location.

26. (Original) The method as claimed in claim 25, wherein said operation (c) comprises:

(c1) if said first ATM cell comprises said full IP tuple, creating said full IP tuple from said first ATM cell;

(c2) if said first ATM cell does not comprise said full IP tuple, receiving a second ATM cell; and

(c3) after receiving said second ATM cell, if said first ATM cell and said second ATM cell comprise said full IP tuple, creating said full IP tuple from said first ATM cell and said second ATM cell.

27-28. (Canceled)

29. (Currently amended) The method as claimed in ~~claim 28~~ claim 25, wherein said validity field indicates that said second pointer points to said particular process flow information after said full IP tuple is created, and wherein said validity field indicates that said second pointer is invalid after a last data packet corresponding to said full IP tuple has been received.

42. (Currently amended) Software contained in a computer readable medium, wherein said software comprises instructions to instruct a processor for performing operations, comprising:

- (a) receiving a first ATM cell;
- 5 (b) determining if said first ATM cell comprises a full IP tuple;
- (c) if said first ATM cell comprises said full IP tuple, creating said full IP tuple from said first ATM cell;
- (d) determining if said full tuple corresponds to an existing process flow;
- 10 (e) if said full tuple does not correspond to an existing process flow, generating new process flow information as particular process flow information; and
- (f) if said full tuple corresponds to an existing process flow, determining that existing process flow information corresponds to said particular process flow information;
- 15 (g) storing said particular process flow information in a first memory location;
- (h) creating a first pointer from a virtual channel identifier/virtual path identifier (VCI/VPI) contained in said first ATM cell, wherein said first
- 20 pointer at least indirectly points to said first memory location; and

(i) storing a second pointer in a second memory location,  
wherein said second pointer comprises a validity field and points to  
said first memory location after said full IP tuple is created, and  
wherein said first pointer points to said second memory location.